PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No.:	10/791,629
Filing Date:	March 3, 2004
Applicant:	Soo-Chan LEE et al.
Group Art Unit:	2829
Confirmation No.:	3096
Examiner:	Jermele M. Hollington
Title:	SYSTEM AND METHOD FOR TESTING SEMICONDUCTOR DEVICES
Attorney Docket:	2421-000033/US

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PRE-APPEAL BRIEF REQUEST FOR REVIEW

Sir:

Claims 1-34 and 37-42 are pending in this application. Claims 1, 3, 5, 6, 11, 25, 31, 33, 34 and 37-40 are independent. Claims 40-42 stand allowed. Claims 11-32, 38 and 39 stand withdrawn.

The pending claims were finally rejected in the Office Action mailed May 19, 2008. This Pre-Appeal Brief Request is submitted in response to the final rejection of the pending claims.

REMARKS

Claims 1-10, 33, 34 and 37 are rejected under 35 USC §103(a) as being unpatentable over US Patent 6,844,717 to Shim, et al. (Shim) in view of JP 2001/215257 to Hyoung.

Applicants respectfully submit that the prior art rejection fails to establish a *prima facie* case of obviousness due to clear legal and/or factual error.

I. Legal Error

In rejecting the claims, it is alleged that Shim discloses all of the features of the independent claims, except the "loading and unloading robot moves in the X-axis and Y-axis." In an effort to overcome the admitted deficiency, the foreign language reference of Hyoung is combined with Shim and it is alleged that it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Shim with the teachings of Hyoung.

In rejecting the claims the Examiner relies on a foreign language reference having only an English language abstract. When relying on a foreign language document in support of a rejection, "if the document is in a language other than English and the Examiner seeks to rely on that document, a translation must be obtained so that the record is clear as to the precise facts the Examiner is relying upon in support of the rejection (MPEP §706.02). As an English language translation has not been provided, reliance on Hyoung is clear legal error.

In rejecting claim 1, it is admitted that Shim merely discloses chambers 50, 60, 100, 101 that are attached to the main body 1 of the test handler, but alleges that the recitation of the chambers being "separable from the main body" (as similarly recited in claims 2 and 7-9) is an intended use and therefore "still reads on the prior art" of Shim (Office Action at page 2, paragraph 4).

Even assuming *arguendo* the claimed feature was merely an intended us, a recitation of an intended use of the claimed invention that results in a structural difference between the claimed invention and the prior art patentably distinguishes the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim (MPEP §707.07(f)). In the present case, there is nothing in Shim to indicate that the chambers

are capable of being separable from the main body. Rather, Shim discloses that the soak chamber, test chamber and de-soak chamber are "in the bottom side of the handler main body" (column 1, lines 41-45). As Shim does not describe a structural feature that would impart separablity to the chambers, the reliance on Shim as disclosing the claimed feature is clear legal error.

II. Factual Deficiencies

Neither Shim nor Hyoung, whether considered alone or in combination, disclose or suggest all of the features recited in the rejected claims. For example, the combination of references fails to disclose or suggest a semiconductor device test apparatus, comprising a soak chamber, a test chamber, and a de-soak chamber, wherein the soak chamber, the test chamber, and the de-soak chamber are attached to the main body and separable from the main body, as recited in independent claim 1, or the similar features of claims 2 and 7-9.

Shim relates to a test handler for testing an electric component, such as an integrated circuit or a semiconductor chip (column 1, lines 6-11). Although Shim discloses a soak chamber 162, a test chamber 163 and a de-soak chamber 164, there is no disclosure or suggestion in Shim that such chambers are separable from the main body 110. Rather, Shim discloses that the soak chamber, test chamber and de-soak chamber are "in the bottom side of the handler main body" (column 1, lines 41-45). Thus, the allegation that Shim discloses such a feature is factually incorrect.

In rejecting independent claims 3, 5 and 6, it is alleged in the Office Action that Shim discloses all of the features recited therein, except for loading and unloading robots that move in both X axis and Y axis directions. For example, regarding claim 3, it is alleged in the Office Action that Shim discloses "a stacker for stacking devices before and after a test, the stacker including user trays for stacking devices, wherein the user trays are interchangeable such that the user trays may be used to stack the devices prior to the test and to stack the devices after the test," as recited in claim 3. Specifically, it is alleged that Shim discloses the user trays are equivalent to test trays 70, and that the user trays are interchangeable.

However, it does not appear from a reading of Shim that the user trays and the test trays are equivalent because the user trays are loaded into a user tray supplier 10 and are placed into an unloading side set plate and that the devices on the user trays are transferred to test trays 70 for testing. Moreover, Shim specifically teaches that the vertical loading robot 90 picks the devices from the user tray placed at the loading side set plates and transfers the devices to the test tray 70 placed at the first tray arrangement station (col. 1, lines 57-60). Thus, there is nothing in the disclosure of Shim to indicate "a stacker for stacking devices before and after a test, the stacker including user trays for stacking devices, wherein the user trays are interchangeable such that the user trays may be used to stack the devices prior to the test and to stack the devices after the test." Thus, the allegation that Shim discloses such a feature is factually incorrect.

Regarding independent claim 5, it is alleged that Shim discloses that the user tray functions are interchangeable during a stacking operation. Specifically, it is alleged that the movement of the test devices from the test trays 70 at the completion of the tests in the chambers 50, 60, etc., teaches that the user trays and the test trays are interchangeable (Office Action at page 3, paragraph 1). However, the movement of the test devices from test trays (used to carry the devices during the testing process) to the user trays (used to move the testing devices) does not disclose or suggest that the users trays functions are interchangeable during a stacking operation. In fact due to the transfer of the devices, it is strongly suggested that the trays are not interchangeable. Thus, the allegation that Shim discloses such a feature is factually incorrect.

Similarly, in rejecting independent claim 6, it is alleged that Shim discloses a user tray supplier 10 and a user tray deliverer 20 that are interchangeable in their uses. Specifically, it is alleged that the movement of tested devices onto empty trays in the tray deliverer 20 discloses the claimed feature (Office Action at page 4, paragraph 2). However, Shim clearly discloses that the untested devices are feed into the chambers via the tray supplier 10 and unloaded into the tray sender 20. Thus, there is no disclosure or suggestion that the supplier 10 and the deliverer are interchangeable in their uses.

Regarding independent claim 33, it is alleged that the claimed element of determining operating speeds of the loading robot, the sorting robot, and the unloading robot based on a speed of testing the device, is "intended use" (Office Action at page 5, paragraph 1). However, as discussed above, if the prior art structure is capable of performing the intended use, then it meets the claim . As Shim does not describe a structural feature that would impart determining the operating speeds of the robots, Shim cannot be interpreted as disclosing all of the claimed features regardless of the alleged intended use.

Similarly, in claim 34, Shim does not disclose a structural feature that would allow a robot to carry a device at a calculated speed, the calculated speed based a time test of execution. Thus, even were the claimed feature interpreted as being an "intended use" as alleged (Office Action at page 5, paragraph 1) Shim cannot be interpreted as disclosing all of the claimed features regardless of the alleged intended use.

CONCLUSION

Appellants respectfully request that the Panel reconsider and withdraw the final rejection of the pending claims and pass the application to allowance.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 08-0750 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

Respectfully submitted,
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By _____

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